

Weir Specialty Pumps



Excellent
Engineering
Solutions



Pump Engineering Test Facilities

281-612-WRXS (9797)

Capabilities

Max. Power: 750 BHP / 560 KW

Max. Flow: 50,000 GPM / 11,300 M³/Hr

Max. Head: 6,000 Ft. / 1800 M



Weir Specialty Pumps

- WSP's pump engineering test facilities have been leading the way in the pump industry for over 60 years!



Photos: Above, Engineering test facility control room. Bottom right, Roto-Jet pumps being tested in high-pressure engineering test facility.

Fast, Accurate, and Precise Testing

Weir Specialty Pumps has built one of the premier pump test facilities in the industry. This multi-million dollar, state-of-the-art test facility guarantees accurate, precise, and consistent testing of numerous pump sizes, types, and configurations. Sizes from 1" to 36"; horizontal, vertical, and submersible configurations; centrifugal, axial, and positive displacement types can all be accommodated.

Pumps can be tested to various industry standards including ANSI/HI (Hydraulic Institute) 1.6, ANSI/HI 2.6, ANSI/HI 11.6, and ISO 9906. WSP is ISO 9001, ISO 14001, and OHSAS 18001 certified, and all test instrumentation is calibrated on a regular schedule.

The efficiency of the test facility is further enhanced by utilizing Lean Manufacturing processes to ensure rapid test set ups, and our on-demand data acquisition coupled with real-time data processing provides instant feedback on all aspects of pump performance.

The WSP engineering staff and test technicians have many years of experience in the pump industry, and our own Professional Engineers are available to witness the testing and certify the results.

Test options include standard hydraulic testing including flow, head, and power; vibration; noise; NPSH; suction lift; hydrostatic pressure testing; and temperature.

A dedicated customer witness area with a large flat screen display allows customers to witness in real time the exact details of all aspects of the testing. The test results are immediately available electronically, and test reports with performance curves are quickly produced for the client.

Capabilities

- Maximum Power: 750 bhp / 560 kw
- Maximum Flow: 50,000 gpm / 11,300 m³/hr
- Maximum Head: 6,000 feet / 1800 m
- Total floor space 8,500 sq.ft. / 800 m²
- Electrical Power 60 Hz at 230V/380V/460V/575V 3 phase - other voltages and frequencies are available upon request.
- Variable frequency drive up to 400 hp / 300 kw
- Total liquid volume (3 reservoirs): 90,000 gallons / 340 m³
- Pipe size: Up to 36 inch / 900 mm
- Crane capacity: 20 ton (18 tonne) and 10 ton (9 tonne)

Engineering Data Acquisition

- Pressure transducers (vacuum to 5,000 psi / 340 bar)
- Magnetic flow meters (to 50,000 gpm / 11,300 m³/hr)
- In-line torque meters (to 100,000 in-lbs / 11,300 n-m)
- Watt meters (to 400 bhp / 300 kw)
- Amp meters (to 500 A)
- Vibration analyzer (5 channel)
- Noise meter
- Infra-red temperature measurement thermocouples



The Weir Specialty Pumps engineering test facility is available for your custom testing needs. Contact Weir Specialty Pumps for more information.



Photos: Above, WEMCO Self-Primer on test cart. Top right, Large horizontal & vertical pump test area. Middle right, Pumps being tested. Bottom right, Customer witness area in control room. Bottom left, large centrifugal pump package being tested.





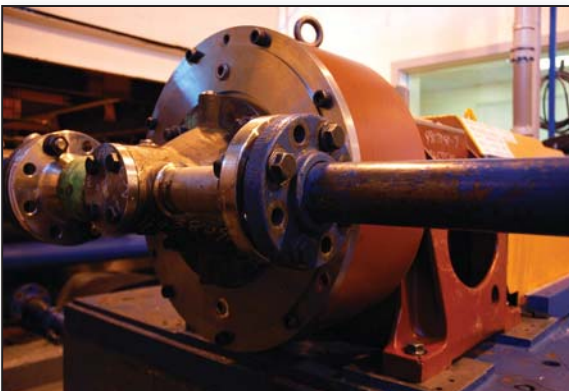
Large Pump Test Area		
Installed motor w/torque transducer	750	bhp (560 kw)
Available VFD	400	bhp (300 kw)
Available Starter	400	bhp (300 kw)
Maximum flow (depends on head)	50,000	gpm (11,300 m ³ /hr)
Maximum head	200	ft (60 m)
Supply tank	45,000	gallons (170 m ³)
Flow meters	12 inch (300 mm) & 24 inch (600 mm)	
Maximum discharge size	36	inch (900 mm)
Configurations: Package and bare pumps, horizontal and vertical		



Small Pump Test Area		
Installed motor w/torque transducer	200 bhp (150 kw) & 60 bhp (45 kw)	
Available VFD	200	bhp (150 kw)
Available Starter	200	bhp (150 kw)
Maximum flow (depends on head)	7,500	gpm (1700 m ³ /hr)
Maximum head	300	ft (90 m)
Supply tank	45,000	gallons (170 m ³)
Flow meters	4 inch (100 mm), 6 inch (150 mm) & 10 inch (250 mm)	
Maximum discharge size	10	inch (250 mm)
Configurations: Package and bare pumps, horizontal and vertical		



Submersible Pump Test Area		
Available VFD	400	bhp (300 kw)
Available Starter	400	bhp (300 kw)
Maximum flow (depends on head)	9,000	gpm (2000 m ³ /hr)
Maximum head	300	ft (90 m)
Supply tank	35,000	gallons (130 m ³)
Flow meters	6 inch (150 mm) & 12 inch (300 mm)	
Maximum discharge size	12	inch (300 mm)
Configurations: Submersible and vertical pumps		
Other: Contains a self primer lift testing station		



High Pressure Pump Test Area		
Installed motor w/torque transducer	500 bhp (375 kw) & 250 bhp (185 kw)	
Available VFD	250	bhp (185 kw)
Available Starter	250	bhp (185 kw)
Maximum flow	700	gpm (160 m ³ /hr)
Maximum head	6,000	ft (1800 m)
Supply tank	10,000	gallons (38 m ³)
Flow meters	2 inch (50 mm) & 3 inch (75mm)	
Maximum discharge size	6	inch (150 mm)
Configurations: Package and bare pumps, horizontal only		
Note: maximum allowable bare pump center line height is 11.5 in. (290 mm)		

Weir Specialty Pumps

440 West 800 South
P.O. Box 209 (84110-0209)
Salt Lake City, UT 84101
USA

Tel: 801 359 8731
Fax: 801 530 7828
email: info@weirsp.com
www.weirsp.com



Excellent
Engineering
Solutions

